No.	Water Related RAOs or Management Goals	Receptor	Matrix	LWG Stated Position	LWG Comments
Work Plan (LWG) Endorsed					
1	Human Health - protect for direct contact and incidental ingestion of surface water	Human Health	Surface water	LWG has agreed in writing to development and use of this PRG.	LWG is proceeding with PRG development.
2	Ecological - protect for contact with and ingestion of surface water	Ecological	Surface water	LWG has agreed in writing to the development and use of this PRG.	LWG is proceeding with PRG development.
EPA Additional					
3	Ecological - protect for groundwater water exposures to aquatic life	Ecological	Ground water	LWG has indicated that groundwater is a source issue and acceptable levels in groundwater should be set by DEQ, not EPA.	The LWG does not agree that non-river or source matrices should be part of FS PRGs. This is part of the "recontamination issue". See Item 9 below.
4	Ecological - protect for TZW exposures to aquatic life	Ecological	TZW	LWG has indicated that ambient water quality criteria can be applied to TZW as a screening value but not directly for risk assessment or for use as a PRG or management goal.	In the BERA the LWG will present the results of the screening of TZW in plume discharge areas using ambient water quality criteria. We will also discuss in the uncertainty section of the BERA the porewater avoidance mechanisms with respect to benthic exposures and factors affecting discharge of TZW into surface water. (On 5/14/08, EPA and LWG agreed that LWG would not need to estimate TZW concentrations in areas of the river outside plume discharge areas and compare the estimated values to AWQC.) Risk contributions due to exosures to chemicals in TZW will be addressed by sediment PRGs, which implicity include porewater exposures. The LWG would also be willing to agree to develop "management goals" for TZW that relate to in-river impacts from upland groundwater sources (and from which goals for upland groundwater remediation might be developed on a site specific basis). We do not agree these are PRGs or relate to an RAO for the FS, because the FS does not address remediation of groundwater. The proposed management goals would focus on areas of groundwater plume discharge and chemicals in those plumes to address in-river cleanup issues that may be created by any "stranded plume wedges" after upland groundwater controls at the top of bank have been implemented. These management goals would not be intended to apply directly to upland groundwater sources and the FS will assume that DEQ has controlled any unacceptable groundwater plumes before sediment remediation can begin. The management goals will include modifying factors account for actual exposure of benthic organisms to TZW. The management goals would also discuss the alternative use of bioassays to directly evaluate TZW toxicity.
5	Human Health - protect for ingestion of surface water (this is assumed to include drinking water scenarios, not just incidental ingestion per the Work Plan RAO)	Human Health	Surface water	LWG has indicated that drinking water standards could be used as screening levels but are not PRGs and the standards are not ARARs for the site.	The current draft of the human health risk assessment follows EPA's detailed directions for evaluating this exposure scenario, including the use of vertically integrated surface water data. That assessment concludes that no MCLs are exceeded. It also indicates that arsenic is the only chemical exceeding a cancer risk of 10-6 or hazard quotient of 1. The arsenic risks are consistent with background conditions. Because the RAOs should be directly linked to the findings of the risk assessment, we see no need for a drinking water related RAO based on the risk assessment. If Drinking Water Standards are an ARAR, a point that the LWG does not agree to (see August 21, 2008 "Background Document"), they would need to be applied in an appropriate manner, which would include integration of water samples. For the vertically integrated surface water data, there are no exceedances of MCLs, which indicates there is no need for this RAO based on potential ARARs.

No.	Water Related RAOs or Management Goals	Receptor	Matrix	LWG Stated Position	LWG Comments
6	Human Health - protect for ingestion of fish and shellfish that accumulate contaminants from surface water	Human Health	Surface water	LWG has indicated that bioaccumulation based ambient water quality criteria can be used as screening levels. They are not PRGs because there is no Work Plan RAO to for this pathway.	This is primarily a sediment cleanup. Sediment PRGs for bioaccumulation account for water exposure (either explicitly with the FWM or implicitly with BSAFs) so these potential surface water risks are managed through the implementation of the sediment PRGs. Bioaccumulation PRGs based on water quality criteria are inappropriate because they are not site-specific and are inconsistent with the sediment PRG approach and related assumptions.
7	Human Health - protect for ingestion of shellfish from TZW exposures	Human Health	TZW	Same position as Item 6. Additionally, ambient water quality criteria developed for the surface water column cannot be directly applied to TZW, due to porewater avoidance mechanisms with respect to benthic exposures.	Per the 4/30/08 RI/RA Issue Resolution Table, "EPA agrees the evaluation of TZW as a source of contaminants in biota is no longer required in the HHRA...EPA may in the future require the presentation of TZW data relative to human health fish consumption AWQC for the purpose of evaluating the contribution of contaminated groundwater to biota tissue." Although we understand that EPA is holding open the option to make comparisons of TZW to AWQC, RAOs should be directly linked to risks presented in the risk assessment. Similar to our postion on Items 4 and 6, bioaccumulative chemicals in sediment are generally highly sorbed to the sediment matrix, are not associated with dissolved groundwater plumes, and are therefore, most directly addressed through sediment PRGs.
8	Human Health - protect for TZW discharges to surface water such that surface water goals are met.	Human Health	TZW	Same position as Item 6. Also, drinking water is not an ARAR for the site surface water or TZW.	As described above, this is primarily a sediment cleanup and sediment PRGs should, for the most part, be all that is necessary to select a protective cleanup. To the extent the Work Plan called for surface water goals (see Items 1 and 2 above), the PRGs should be stated for those surface water exposures; there is no need for an intermediate TZW RAO or PRG to protect surface water. Refer to Items 1, 2, 5 and 6 for LWG positions on surface water PRGs.
9	Recontamination - EPA believes that an RAO that focuses on minimizing recontamination potential is also required.	All	All source pathways to river	Source control is directed by DEQ working with individual parties. LWG has no ability to select source control alternatives for those parties. Therefore, source control PRGs are not required for the sediment FS.	Because the FS will not select source control alternatives, RAOs or PRGs for recontamination are not needed for the FS.